REMARKS

In response to the Office Action mailed September 7, 2010, the Assignee of the present application (Nuance Communications Austria GMBH) respectfully requests reconsideration. Claims 1-20 were previously pending for examination. Claims 1-20 are canceled herein without prejudice or disclaimer. Claims 21-46 are added. As a result, claims 21-46 are currently pending, with claims 21, 31, 37, and 43 being independent. No new matter has been added.

Support for Claims 21-46

The Assignee attempted to amend claims 1-20 but decided to instead cancel claims 1-20 and add new claims 21-46 for better readability. Claims 21-46 are supported throughout the original disclosure, for example, at the claims as originally filed, FIGs. 1-5, and pages 2-8 of the specification. As such, claims 21-46 do not introduce any new matter into this application.

Claim 21 corresponds to, and broadens, canceled claim 1 in at least some respects, for example, by removing the limitations, "by making use of [] statistical models [] extracted from [] training data," and rephrasing the "generating" and "providing" limitations into a single "providing" limitation. Claim 21 adds a limitation of "receiving user input indicating at least one modification to the first structured text." This limitation is believed to have been implicit in canceled claim 1, which recited, "processing of modifications of the structured text in response to a user's review."

Claim 31 and 37 correspond, respectively, to canceled claims 10 and 15 in similar ways as discussed above with respect to claim 21. Claim 37 has also been rewritten to remove means-plus-function language.

Claim 43 corresponds to, and broadens, canceled claim 18 in at least some respects, for example, by removing the limitations, "making use of statistical models extracted from training data," "providing a set of labels," and "logging and analyzing processed modifications." Claim 43 adds a limitation of "means for receiving user input indicating at least one modification to the first structured text." This limitation is believed to have been implicit in canceled claim 18, which

recited, "input means for processing of modifications of the structured text in response to a user's review."

The above summary is provided solely for the Examiner's convenience. The Examiner is requested to fully examine the language of claims 21-46 and not to rely on the above summary in determining the scope of each of claims 21-46.

Rejection under 35 U.S.C. § 101

The Office Action rejects claims 15-17 under 35 U.S.C. § 101, as purportedly being directed to non-statutory subject matter. The Assignee has herein canceled claims 15-17 and therefore believes it is unnecessary to address the merits of the rejections. However, the Assignee's silence with regard to these rejections should not be construed as agreement that the rejections were proper.

As discussed above, claim 37 corresponds to canceled claim 15 and recites "[a]t least one computer-readable storage device having encoded thereon executable instructions," rather than a "computer program product" as recited in canceled claim 15. One skill in the art could readily appreciate that a computer program product could be stored on one or more storage devices, such as, but not limited to, computer memories, floppy discs, compact discs, and/or flash memories. Further support for "computer-readable storage device" can be found, for example, at FIG. 5 and the associated description.

Overview of Embodiments

Conventionally, text formatting systems often produce errors when processing an unstructured text (e.g., as generated by a speech-to-text transcription system) to generate a structured text, and a human proofreader has to browse through the structured text output by the text formatting system to determine whether the structured text has been formatted correctly. Page 1, lines 18-28.

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The specification evidences an appreciation that various tasks of proofreading, such as partitioning text into sections and inserting section boundaries and headings, can be demanding and time consuming. Page 2, lines 4-10. Accordingly, in some embodiments, a system is provided to assist a user in performing those tasks by automating text segmentation and topic assignment, while allowing the user to efficiently review and modify the result. Page 2, lines 15-31, page 3, lines 1-2. In this manner, the user retains control over formatting decisions, and the system assists the user in implementing those decisions. Page 2, lines 30-31, page 3, lines 1-2.

In accordance with some embodiments, a system is provided that automatically segments an unstructured text into sections and assigns topics to the sections. Page 2, lines 15-18. For example, in a medical report, abstract topics like "demographic header," "patient history," "physical examination," and "medication" may be assigned to various sections. Page 3, lines 12-14. Each abstract topic may be associated with multiple section headings that are suitable for labeling a section identified by that topic. Page 3, lines 15-17. For example, a section identified by the topic "physical examination" may be labeled by any of the section headings, "physical examination," "examination," "exam," or "surgical examination." Page 3, lines 17-19.

In some embodiments, the system may automatically select for each section a section heading associated with the topic assigned to that section and insert the selected section heading at the beginning of the section. Page 2, lines 24-29, page 4, lines 3-11. The resulting structured text may be provided to the user for review and, upon instructions received from the user, the system may perform modifications to the structured text. Page 2, lines 30-31, page 3, lines 1-2.

The foregoing overview is provided to assist the Examiner in appreciating some applications for various inventive aspects of the present disclosure. However, this overview may not apply to each of the independent claims, and the language of the independent claims may differ in material respects from the summary provided above. Thus, the Assignee respectfully requests that careful consideration be given to the language of each of the independent claims and that each be addressed on its own merits, without relying on the overview provided above. In this respect, the Assignee does not rely on the overview provided above to distinguish any of the claims over the prior art.

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Rather, the Assignee relies only upon the language of the claims themselves and the arguments related specifically thereto.

<div align="center">Rejections Under 35 U.S.C. § 102</div>

The Office Action rejects claims 1-20 under 35 U.S.C. § 102(e) as purportedly being anticipated by Kanevsky (U.S. Patent No. 6,529,902). Without acceding to the propriety of the rejections, the Assignee has herein canceled claims 1-20 and added claims 21-46. To the extent that any of claims 21-46 is to be rejected based on Kanevsky, the Assignee respectfully disagrees.

I.   Claim 21

Claim 1 recites a method comprising: "segmenting the unstructured text into text sections; assigning, to at least one text section, a topic being indicative of content of the at least one text section; providing to a user a first structured text comprising the at least one text section and a section heading for the at least one text section, the section heading corresponding to the topic assigned to the at least one text section; receiving user input indicating at least one modification to the first structured text; and using a computer system to process the at least one modification received from the user to generate a second structured text." Kanevsky does not teach or suggest such a method.

Kanevsky describes a system that detects topical changes in a text. Column 1, lines 9-15. The system analyzes the text in two "time" directions, forward (i.e., from the beginning to the end) and backward (i.e., from the end to the beginning). Column 2, lines 13-30. If the same topics are obtained for both directions, they are used to label the corresponding portions of the text. Column 2, lines 36-45. If conflicting decisions are obtained, the system attempts to resolve them. Column 2, lines 46-49.

At page 4, the Office Action alleges that Kanevsky teaches providing a structured text to a user and processing modifications in response to the user's review, as previously recited in claim 1,

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because Kanevesky purportedly discloses, at column 10, lines 18-30, "reprocessing according to the user's choosing/review." The Assignee respectfully disagrees.

The passage at Kanevsky, column 10, lines 18-30, states:

> This procedure of topic batteries and language models (LMs) is performed once from a textual database 00 based on application of interest (e.g., in segmentation of text containing news, the user could limit himself to topics typically appearing in the news, such as "legal," "medical," "science," etc.). This data is used subsequently for topic segmentation (e.g., module 08) and improved LMs (e.g., that are created as mixtures for confusable states). If some labels from different time directions coincide, then this label is chosen and is placed in the middle of a location of labels from two directions by averaging respective edges, as described above (e.g., module 08). Otherwise, a mixture of LMs is created as described above (module/block 09).

In this paragraph, the only reference to a "user" appears in the discussion that, when creating a topic battery at step 01 of FIG. 1A for a particular application area (e.g., "news"), a user could specify a limited set of topics for use by the system (e.g., "legal," "medical," "science," etc.). Kanevsky, column 10, lines 18-23. This user selection of potential topics occurs once to establish requisite data that is subsequently used in topic segmentation. Kanevsky, FIG. 1A, column 10, lines 18-25. There is no mention of providing a structured text to a user and processing modification received from the user. Therefore, Kanevsky fails to teach or suggest at least the combination of: "providing to a user a first structured text ...; receiving user input indicating at least one modification to the first structured text; and using a computer system to process the at least one modification received from the user to generate a second structured text," as recited in claim 21.

For at least this reason, claim 21 is believed to be in allowable condition.

Claims 22-30 depend from claim 21 and are allowable for at least the same reasons.

II.   Claim 31

Claim 31 recites a computer system configured to: "segment the unstructured text into text sections; assign, to at least one text section, a topic being indicative of content of the at least one text section, the topic being associated with a plurality of section headings; provide to a user a first structured text comprising the at least one text section and a section heading for the at least one text section, the section heading being selected from the plurality of section headings associated with the topic assigned to the at least one text section; receive user input indicating at least one modification to the first structured text; and process the at least one modification received from the user to generate a second structured text." For reasons that should be clear from the foregoing discussions of Kanevsky, Kanevsky does not teach or suggest such a computer system. Therefore, claim 31 is believed to be in allowable condition.

Claims 32-36 depend from claim 31 and are allowable for at least the same reasons.

III.   Claim 37

Claim 37 recites at least one computer-readable storage device having encoded thereon executable instructions that, when executed by a computer system, perform a method comprising acts of: "segmenting the unstructured text into text sections; assigning, to at least one text section, a topic being indicative of content of the at least one text section, the topic being associated with a plurality of section headings; providing to a user a first structured text comprising the at least one text section and a section heading for the at least one text section, the section heading being selected from the plurality of section headings associated with the topic assigned to the at least one text section; receiving user input indicating at least one modification to the first structured text; and processing the at least one modification received from the user to generate a second structured text." For reasons that should be clear from the foregoing discussions of Kanevsky, Kanevsky does not teach or suggest such a method. Therefore, claim 37 is believed to be in allowable condition.

Claims 38-42 depend from claim 37 and are allowable for at least the same reasons.

IV.   Claim 43

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Claim 43 recites a system comprising: "means for providing to a user a first structured text comprising at least one text section and a section heading for the at least one text section, the at least one text section being one of a plurality of text sections obtained from segmenting an unstructured text, the section heading being selected from a plurality of section headings associated with a topic assigned to the at least one text section, the topic being indicative of content of the at least one text section; means for receiving user input indicating at least one modification to the first structured text; and means for processing the at least one modification received from the user to generate a second structured text." For reasons that should be clear from the foregoing discussions of Kanevsky, Kanevsky does not teach or suggest such a system. Therefore, claim 43 is believed to be in allowable condition.

Claims 44-46 depend from claim 43 and are allowable for at least the same reasons.

General Comments on Dependent Claims

Because each of the dependent claims depends from a base claim that is believed to be in condition for allowance, the Assignee believes that it is unnecessary at this time to argue the further distinguishing features of all of the dependent claims. However, the Assignee does not necessarily concur with the interpretation of the dependent claims as set forth in the Office Action, nor does the Assignee concur that the basis for the rejection of any of the dependent claims is proper. Therefore, the Assignee reserves the right to specifically address in the future the further patentability of the dependent claims not specifically addressed herein.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number indicated below to discuss any outstanding issues.
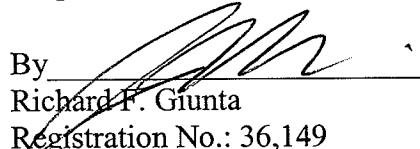
If this response is not considered timely filed and if a request for an extension of time is otherwise absent, the Assignee hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed payment, please charge any deficiency to Deposit Account No. 23/2825 under Docket No. N0484.70066US00 from which the undersigned is authorized to draw.

Dated: 12/7/10

Respectfully submitted,

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